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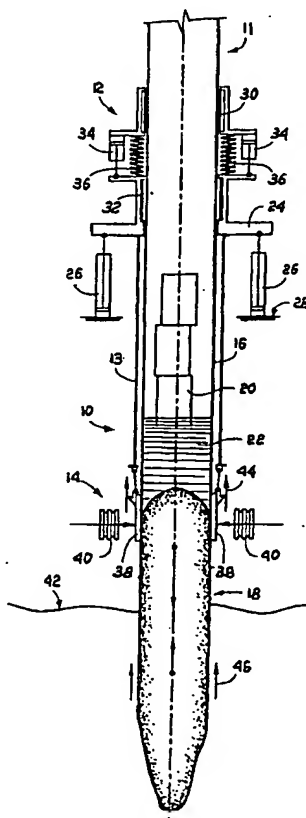
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- (71) Applicant (for all designated States except US): **PY-  
ROMET PROPRIETARY PRODUCTS (PTY) LIM-  
ITED [ZA/ZA]; 10 Sherborne Road, Parktown, 2193  
Johannesburg (ZA).**
- (72) Inventor; and  
(75) Inventor/Applicant (for US only): **SIDORSKI, Euge-  
nius, Daniel [ZA/ZA]; 360 Surrey Avenue, Ferndale, 2194  
Randburg (ZA).**
- (74) Agents: **MCCALLUM RADEMEYER & FREIMOND  
et al.; PO Box 1130, 7 June Avenue, Bordeaux, 2125 Rand-  
burg (ZA).**
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(54) Title: **ARC FURNACE ELECTRODE LENGTH DETERMINATION**



(57) **Abstract:** This invention relates to an electrode column and a method of determining the length of the electrode in it in an active furnace. The column is a Söderberg column including a mantle in which the electrode is movable in an axial direction by lower and upper slipping clamps which are movable relatively to each other by slipping cylinders. The method includes the steps of moving, with the slip clamps, the electrode in a downslip relatively to the mantle by means of the slipping cylinders and gravity and measuring the force required to move the electrode by means only of the upper slipping clamp against predetermined reaction forces acting against movement of the electrode and computing these parameters to determine the mass and so the length of the electrode relatively to the theoretical mass of the undamaged electrode at the time of movement.